



Assessment

Patient communication competence: Development of a German questionnaire and correlates of competent patient behavior



Erik Farin*, Erika Schmidt, Lukas Gramm

Department of Quality Management and Social Medicine, University Freiburg – Medical Center, Freiburg, Germany

ARTICLE INFO

Article history:

Received 17 April 2013

Received in revised form 25 October 2013

Accepted 19 November 2013

Keywords:

Patient–provider communication
 Patient communication competence
 Questionnaire development
 Chronic back pain
 Chronic ischemic heart disease
 Breast cancer

ABSTRACT

Objective: The aim of our study was to design and psychometrically test a patient questionnaire to capture patient communication competence in the context of patient–provider interaction (CoCo questionnaire). We also aimed to determine patient characteristics associated with competent patient behavior.

Methods: To assure content validity, we initially conducted 17 focus groups ($n = 97$) made up of patients and providers. In the main study $n = 1.264$ patients with chronic back pain, chronic-ischemic heart disease or breast cancer who underwent inpatient rehabilitation were surveyed at the end of rehabilitation.

Results: The CoCo questionnaire contains four scales (patient adherence in communication, critical and participative communication, communication about personal circumstances, active disease-related communication) and 28 items addressing competent patient behavior. We provide evidence of unidimensionality, local independence, reliability, a Rasch-Model fit, the absence of differential item functioning, and signs of construct validity. The most important correlates of communication competence are health literacy and communication self-efficacy.

Conclusion: The CoCo questionnaire has good psychometric properties in German. Future research should examine CoCo's responsiveness and analyze criterion validity by means of observation data.

Practice implications: The CoCo questionnaire can be recommended for use in evaluating patient communication training programs.

© 2013 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Research over the last several years has increasingly focused on patient–provider communication, revealing that it is a dyadic communication situation involving both the treatment provider's communication skills as well as the patient's competencies ([1–6]). Such approaches tend to be theoretically based on communication theories that regard the division of power in unequal relationships (such as the patient–provider relationship – i.e., the dyadic power theory of Dunbar [7]), as well as specific theoretical models such as Cegala's Medical Communication Alignment Theory [2].

A key argument favoring the significance of patient communication competencies is that the idea of active patient–provider interaction corresponds closely with the aims of patient empowerment [8] and self-management [9]. The patient that is capable of

managing symptoms, treatment, and the consequences of a chronic condition should also play an active role in shaping patient–provider communication. Furthermore, various studies have identified that patient communication skills exert a positive influence on physicians' communicative behavior [2,3,10,11].

There are two main methods by which patients' communication skills can be measured in conjunction with their interaction with treatment providers: for one, observation methods involving recording the interaction with audio tapes or video technology that are then analyzed for competent and active patient behavior ([1,11]), another is via questionnaires in which patients or their providers report after an interaction during which communicatively competent behavior had been exhibited ([12,13]).

The drawback of questionnaires is that they capture the perception of a behavior that may be less objective than the observation made by an unbiased researcher. On the other hand, they are inexpensive to administer and allow larger cohorts to be examined for the same expenditure. We find this to be a key advantage, as an important application of such an instrument is to evaluate communication skill training, and we can count on effects that are not that strong ([14,15]). So, high sample sizes are required

* Corresponding author at: University Freiburg – Medical Center Department of Quality Management and Social Medicine, Engelbergerstr. 21, D-79106 Freiburg, Germany. Tel.: +49 761 270 74430; fax: +49 761 270 7331.

E-mail address: erik.farin@uniklinik-freiburg.de (E. Farin).

to ensure adequate study power. Bylund et al. ([5], p. 301) came to the conclusion that "... a second deficit of the literature in this area is the lack of a valid, reliable patient self-report measure about communication behavior."

Our primary goal was to design and psychometrically test a patient questionnaire measuring communication competence in the context of patient–provider interaction (the CoCo questionnaire). The instrument should thoroughly reflect relevant patient communication skills, seen as important by providers and chronically ill patients, it should be economical to administer, and meet stringent methodological standards. To minimize the influence of social desirability, the CoCo questionnaire should capture the competent communication behavior that was actually demonstrated ("I posed questions ...", behavioral competence), and not be simply a self-assessment of competence ("I am able to pose questions ...", perceived competence). We assume that this operationalization enables us to capture communication competence.

We are unaware of any questionnaire that fulfills the above mentioned demands. Bylund et al. [5,16] reported on developing a Patient Report of Communication Behavior (PRCB), which is theoretically oriented toward the PACE system [17]. However, each competence area is covered by only two items, there are no subscales, and only data on internal consistency are presented. Roter et al. [12] address self-reported patient communication behavior with an 18-item self-report questionnaire designed for their study. With the exception of internal consistency, no further psychometric properties are given. The reliability values range only between 0.61 and 0.88. Ashton et al. [18] report on the development of a patient self-assessment tool to measure communication behaviors during doctor visits, but we know of no study that has presented psychometric properties. Older instruments such as the Medical Communication Competence Scale by Cegala et al. [19] or the Perceived Involvement in Care Scale by Lerman et al. [20] were either not subjected to thorough testing, or they just capture partial aspects of communication competence. To summarize: the psychometric characteristics of the instruments currently available have not been thoroughly researched. Moreover, they fail to address aspects such as communication about personal circumstances. This last factor appears quite important, as certain patient groups (i.e. the elderly, c.f. [21]) value more personal, face-to-face communication.

A second aim of our study was to determine patient characteristics potentially associated with patient communication competence. We tested two hypotheses in this context: (1) that the significance of correlates varies somewhat according to the competence area under consideration, (2) that, in addition to other basic sociodemographic characteristics, communication health literacy and communication self-efficacy play a key role in predicting communication competence. The confirmation of hypothesis 2 can be considered proof of the CoCo questionnaire's construct validity, while the confirmation of hypothesis 1 would provide further proof that it makes sense to develop an instrument that differentiates various facets of patient communication competence.

2. Methods

2.1. Instrument development – focus groups and cognitive interviews

In determining the content of the CoCo questionnaire, we oriented ourselves primarily on that which patients and experienced providers consider to be useful and important patient communication behavior. While most of the research efforts on this topic have investigated providers' opinions only [6,22,23]) (one exception being the study by Cegala et al. [24]), we wanted to

integrate in parallel the views of both the patients and providers in generating items.

To that end, we conducted 17 focus groups (9 with patients, 8 with providers) from rehabilitation centers. In the focus groups were patients diagnosed with chronic back pain (CBP, $n = 22$), chronic-ischemic heart disease (CIH, $n = 18$) and breast cancer (BC, $n = 9$), as well their providers (physicians, nursing staff and therapists totaling $n = 48$). The key question posed to all participants was 'How should a patient act when speaking to his or her physician so that the conversation proceeds in a useful and beneficial manner for the patient?'. In case those being questioned failed to bring up any of the four areas of communication proven to be important to patients in our previous work [21] (patient participation and patient orientation, effective and open communication, emotionally supportive communication, communication about personal circumstances), we addressed those areas specifically regarding whether a patient should behave in that manner when consulting with their physician. The patient interviews lasted between 40 and 75 min, the focus groups with providers between 35 and 45 min.

The group discussions were recorded and transcribed. The contents were analyzed by two coders with the aid of Atlas.ti software [25]. A coding system was developed in several steps. As the feedback from the patients and providers did not differ fundamentally, we were able to devise a uniform coding system. In the final version, this contained 12 supercategories (i.e., "providing factual information") and a total of 109 subcategories (e.g., "provide specific information about symptoms"). One hundred and forty-four items were generated from the subcategories (CoCo Version 1), while we made sure that the contents of the most frequently coded subcategories were also adequately represented in the items. We devised statements having five response categories: strongly disagree, disagree, somewhat disagree, somewhat agree, agree, strongly agree. Two scientists were involved in this process. Version 1 was examined by a third scientist for redundancies and comprehensibility, and the item set was reduced to 81 Items (Version 2). These items were presented to 10 patients in a cognitive interview [26] in which thinking-aloud and verbal-probing techniques were used. The patients' remarks were used to revise and if necessary, omit items. After the cognitive interviews, 77 items remained (version 3).

2.2. Sample

To test the CoCo questionnaire psychometrically, $n = 1.264$ patients with CBP, CIH or BC undergoing inpatient rehabilitation were surveyed at the end of rehabilitation. Only those patients were enrolled in this study who could comprehend a German-language questionnaire, but not all of them were native speakers. 34 Rehabilitation centers participated in the survey. The study was approved by the ethics committee of the University of Freiburg (approval number 149/11). The mean percentage of patients that did not fill out the questionnaire was 35.8% from all centers. The most important reason for non-inclusion was refusal to participate (57.2%) followed by cognitive or physical limitations (15.5%) and language difficulties (10.3%). Table 1 provides information on the patients in the study.

2.3. Instruments

We administered instruments other than the CoCo questionnaire to test construct validity (c.f. the hypotheses in Section 2.4.2), and to determine predictors of communication competence (c.f. Section 2.4.3). We employed the KOVA questionnaire [27] (which captures physicians' communication behavior as perceived by patients) and a scale to evaluate communication with the

Download English Version:

<https://daneshyari.com/en/article/6154085>

Download Persian Version:

<https://daneshyari.com/article/6154085>

[Daneshyari.com](https://daneshyari.com)